WPS3176

Location Decisions and Nongovernmental Organization Motivation: Evidence from Rural Bangladesh

Varun Gauri
The World Bank, MSN MC 3-311,
1818 H St. NW, Washington DC 20433
vgauri@worldbank.org,

Anna Fruttero
New York University
af295@nyu.edu

World Bank Policy Research Working Paper 3176, December 2003

We thank Luca Flabbi, Eliana La Ferrara, Jonathan Morduch, Rohini Pande, Debraj Ray, Jakob Svensson, and participants at the NEUDC 2002 conference in Williamstown for helpful comments.

Abstract

Non-governmental organizations (NGOs) play an increasingly important role in development assistance, but little systematic evidence is available about their objectives and choices in developing countries. This paper develops two stylized accounts of NGO motivation: one in which donor contracts determine location decisions, and another in which altruistic motivations are the principal determinants. The paper then uses data from the 1995 and 2000 rounds of the Bangladesh Household and Income and Expenditure Survey to analyze location decisions of NGO programs established between those two sample years. Whether disaggregated by sector of work or mother organization, the data show that the net change in NGO programs in a community was not related to indicators of community need, and that NGOs established new programs where they themselves had no programs previously, but that they were not concerned with duplicating the efforts of other NGOs. Overall, the analysis is consistent with an account of NGO motivation in which a concern for broad coverage on the part of donors significantly affects NGO choices.

Contents

1. Introduction

Over the past twenty years there has been a dramatic shift in the provision of basic services in several developing countries. Services in health care, education, and rural credit, once largely the province of government ministries and other public entities, are increasingly being provided by non-governmental organizations (NGOs). This is attributable, in part, to the increasing role of NGOs in development assistance. Whereas 20 percent of World Bank–financed projects approved in 1989 included some NGO or community-based organization (CBO) involvement, that figure was 47 percent in 1997. A survey of World Bank projects approved between 1985 and 1997 found that the institution channeled $1.3 billion of development assistance through NGOs in seven countries alone (Gibbs, Fumo, and Kuby 1999). Even well-known skeptics of foreign aid are supportive of NGO work: Senator Helms has advocated raising the U.S. foreign aid budget provided that "charities" become the recipients (*New York Times*, January 12, 2001). In the same article a USAID spokesman reported that 37 percent of the agency's bilateral development assistance went through non-governmental groups.

Yet, despite this widespread interest and a large number of case studies, there has been little systematic and quantitative analysis of NGOs active in developing countries, their objectives, and their choices.[1] This paper investigates location decision of NGO programs in Bangladesh. An understanding of this issue is important for both theoretical and practical reasons. First, identifying where NGOs go is important for poverty reduction. In designing their strategies, donors and developing country policymakers would like to know if NGOs actually target the poorest villages and neediest communities, as many claim to do. Second, a clearer understanding of location choice is important for developing an account of NGO incentives, which in turn could help donors and governments devise better contracts for motivating NGOs. Third, because an evaluation of the impact of public programs requires a prior account of location decisions in order to obtain unbiased estimates (Rosenzweig and Wolpin 1986; Pitt, Rosenzweig and Gibbons 1993), understanding the determinants of NGO location assists in evaluating the broader impact of NGO work.

NGOs are non-profit organizations presumably guided by altruism. As a result, the forces that affect their location decisions might differ from those that influence firms or banks, which rely on an explicit evaluation of the present value of future returns and the costs of operating. A quick review of the stated objectives of two Bangladeshi NGOs in their brochures reveals this: "Grameen Bank provides credit to the poorest of the poor in rural Bangladesh without any collateral. At Grameen Bank, credit is a cost effective weapon to fight poverty and it serves as a catalyst in the overall socioeconomic development"; and "Poverty reduction programs undertaken so far have bypassed many

1. Case studies on NGOs in Bangladesh include Stiles (2002), Hadi (2000), Rahman (2002), and Matin and Taher (2001). The literature on not-for-profit organizations in rich countries is further developed. See, for instance, Galaskiewicz and Bielefeld (2001) and Glaeser (2003).

of the poorest. In this context one of BRAC's main focuses is the ultra poor. With multifaceted development interventions, BRAC strives to bring about changes in the quality of life of these people".[2] Consequently, one would expect indicators of poverty or other measures of community well-being to have a considerable effect on the location decisions of these organizations. Indeed, if NGOs were purely altruistic, such factors would be the main determinants of these choices.

Additional considerations, however, can affect NGO location decisions, perhaps predominantly so. Because NGOs, unlike firms and government agencies, obtain funds from external donors who presumably look for demonstrable results, their resources depend on how potential donors react to NGO success or failure.[3] The contract, explicit or implicit, between a donor and an NGO can affect the NGO's incentives and location choices, and even create a conflict between the desire to reduce poverty and support socioeconomic development on the one hand, and the organizational imperative to secure funding on the other on the other. If NGO reputation is important to donors, as it appears to be (World Bank 1996), and if there are declining returns to reputation, then new and unknown new NGOs might undertake risky actions that, if successful, will prove their abilities; but well-established NGOs might prefer safe projects to avoid damaging their reputations. In some cases, the choice that maximizes the likelihood of receiving funds might not be socially optimal. For instance, if locating in an area in which other NGOs are already present reduces the ability of the NGO's donor to determine whom to blame and whom to congratulate for development outcomes, and if as a result failure is not linked to a curtailment of funding from the donor, we might observe a tendency for several NGO programs to concentrate in the same location.[4]

As a heuristic device, we outline two accounts of NGO motivation: a so-called "opportunistic" one and a "benevolent" one. The first highlights the role of implicit contracts in the decisions of NGOs. If these organizations are interested in maximizing their funding, different types of contracts will have different effects on their decisions. The second highlights the desire of NGOs to do the right thing, that is, to reduce poverty and improve the conditions of the most unfortunate, regardless of the effect that their actions have on funding flows. Of course, for most NGOs both forces are probably at

---

2. These descriptions are taken from http://www.grameen-info.org and http://www.brac.net. The management of Grameen Bank frequently points out that it is not legally an NGO: unlike other NGOs, which are incorporated under the Societies Registration Act of 1860 or the Companies Act of 1994, the Grameen Bank has separate incorporating legislation, the Grameen Bank Ordinance of 1983, which granted it specific benefits and exemptions. Nevertheless, the activities of Grameen Bank resemble those of several other NGOs, and the Household Income and Expenditure Surveys of 1995 and 2000, from which data for this paper are taken, includes Grameen Bank in the list of specific "NGOs" it enumerates in each community.

3. At least in principle the government can increase revenues by raising taxes. Annual reports revealed that for the year 2002, BRAC's reliance on donor funding was 22 percent, Proshika 25 per cent, and Caritas 80 percent.

4. Easterly (2002) argues for the existence of this "blame sharing effect" in the work and choices of aid agencies.

play. In other words, NGOs might be benevolent and pragmatic: they might choose to locate in some poor areas, but not in poor areas primarily, because in the latter case the risk of a failure is so high that it could jeopardize the flow of funding from donors.

Using data from the 1995 and 2000 Household Income and Expenditure Surveys (HIES) and the Community Information Schedule of the Bangladesh Bureau of Statistics (BBS), we estimate the determinants of location decisions for NGO programs in Bangladesh. The objective of the analysis is to assess whether NGOs were mainly targeting poorer areas, or whether the need to signal their achievements to donors significantly influenced their location choices. Our paper is closely related to Zeller and others (2001), who use thana-level data from the 1994 Statistical Yearbook of Bangladesh to identify the determinants of branch placement for group-based lending institutions, particularly BRAC, ASA and Proshika. They conduct their analysis at the thana, or subdistrict level, and use cross-sectional regressions without addressing the endogeneity of placement choices. In our paper, we use a narrower unit of observation, the community, and we exploit time series information to account for location decisions.[5] Also related is Ravallion and Wodon (2000), who use cross-sectional data from the earlier round (1991–1992) of the Bangladesh Household Expenditure Survey (HES) and data on bank branch locations. They argue that the geographic placement of banks should be influenced by the potential gain from switching to more profitable non-farm activities in rural areas, estimate the potential gains from such switching, and find that Grameen chooses bank locations so that more of those gains are realized by the poor, whereas other banks are located in areas in which the gains favor groups other than the poor.

This paper is structured as follows. Section 2 characterizes the different views of NGOs in the development literature and the context in which Bangladeshi NGOs operate. Section 3 describes the data and presents descriptive statistics. Section 4 formulates two alternative models that can describe NGO behavior. Section 5 discusses the empirical findings in light of the empirical predictions derived in the previous section. Section 6 concludes.

2. Perceptions of NGOs and Country Context

Varying perceptions

Perceptions of non-governmental organizations in development are mixed. On the one hand, some believe that they are flexible, innovative, and efficient vehicles for the delivery of basic services and for poverty alleviation, that they reach poor communities and remote areas at lower cost than governments, that they identify genuine local needs, and that they promote participation and transfer appropriate technologies—they are the "magic bullets" of development (Vivian 1994). On the other hand, others have argued that most NGOs are started and controlled by charismatic individuals who necessarily limit participatory decisionmaking (Wood 1997), and that any evidence of NGO

5. In the year 2000, there were 496 thanas in Bangladesh, with an average population of 230,000; but there 64,000 villages, with an average population of about 1,800.

effectiveness remains weak (Edwards and Hulme 1995). In South Asia, for instance, the Grameen Bank has built a worldwide reputation for its work and now offers development advice and consulting services to a number of other countries. It claims that its credit programs for poor rural women in Bangladesh attain repayment rates consistently over 90 per cent (Khandker, Khalily and Khan 1996) and that they are entirely self-financed.[6] At the same time there are stories of opportunism and corruption, including that of a Pakistani wit who said that while dowries once consisted of cash and livestock, now they include cash, livestock, and an NGO (Smillie and Hailey 2001).

There are two main reasons why perceptions of NGOs differ so. Most obviously, the term encompasses a variety of different organizations. NGOs vary in size and scope, religious orientation, their use of volunteers or professionals, and their relationships to governments and donors. The same NGO, moreover, can evolve substantially over its lifetime. Characterizations of the life of a typical NGO generally describe an evolution from volunteerism, political activity, "conscientization," and small-scale pilots toward professional staff, expansion in size and scale, report-writing and evaluation, contracting with donors and government, and involvement in profit-generating activities (Sooryamoorthy and Gangrade 2001; Wood 1997). At different times, the same NGO can appear to be both original and foreign-directed, selfless and self-promoting, haphazard and efficient, giving credence to various charges of hypocrisy or "selling out."

The second reason that judgments of NGOs tend to be polarized is that NGOs are usually defined in relation to what they are not. Unlike government, NGOs are supposed to be innovative and to respond flexibly to their clients; unlike firms, NGOs are supposed to prioritize the poor and to serve public, rather than private, purposes. The problem with these negative definitions is that the same economic, social, and political pressures that influence public sector and firm behavior eventually affect NGOs. Particularly as they scale up, NGOs inevitably share characteristics of the very entities in opposition to which they are defined. For example, some of the prominent NGOs in Bangladesh arose during the Liberation struggle in the early 1970s, when self-interest was set aside for national reconstruction, and gained further prominence in relief efforts following disastrous floods in 1988 and the cyclone in 1991, times when human needs were obvious and not significantly contested. But after the emergency receded, the NGOs resumed conducting the day-to-day task of helping to articulate and respond to community demands in the traditional Bangladeshi manner—by prioritizing personal relationships, bestowing largesse in the form of access or favors, playing the role of "officer" to rural folk (White 1999). It would have been surprising had NGOs been able to escape the patron-client model that also limits the capacity of government both to represent and serve citizens' needs. To take another example, Sahaya Sadanam, a rural development NGO in India, began as a popular community development association led by a rustic villager with strong Gandhian ideals. As it grew in size and complexity, the founder brought on first

6. For evaluations of Grameen Bank and other micro-finance lenders, see *Wall Street Journal,* Nov 27, 2001; Morduch (1999a, 1999b, 2000).

his wife, then his daughters, a brother, and a son-in-law, to help run the organization because he spent more time away fund-raising. Villagers believed that both the family's and the NGO's expenditures grew lavish, and the NGO resisted an attempt by a local Marxist party to unionize its staff (Sooryamoorthy and Gangrade 2001). Although outrageous to some of those directly involved, from a distance it is not surprising that pressure to employ kin, which afflicts many if not most firms in India, would also affect this private entity. The incongruity stems from the belief that NGOs are supposed to serve public, and never private, objectives.

The country context

Bangladesh makes a good case study because NGOs are unusually concentrated and influential in that country.[7] Their influence in Bangladesh dates to the civil war that led to the nation's independence, in which one million people died and ten million others were displaced, as well as to the disastrous cyclones of 1972, which overwhelmed the capacities of the newly established government in Dhaka. The international agencies and Northern NGOs that offered the government assistance also funded a number of local voluntary organizations that sprung up to help in the reconstruction effort. As conditions became more stable, many of these NGOs expanded their activities to include not only disaster relief, but poverty alleviation more broadly, as well as "consciousness raising," (Hashemi 1996). Donors continued to send resources because the needs were obvious, the absence of ideological or federal divisions in government reduced potential rivals, and a religiously and ethnically homogenous society was receptive (Smillie and Hailey 2001). These initial conditions set the stage for the rapid expansion of Bangladeshi NGOs in the coming years.

Over the last decade foreign donors have increased the share of their support that is channeled through Bangladeshi NGOs. The official funds available to the NGOs went from about 8 percent of overseas development assistance in 1991–1992 to 14 percent in 1994–1995 (Holloway 1998 and World Bank 1996). Some of the more prominent NGOs, such as BRAC and Proshika, have negotiated $50 million assistance packages with foreign donors (Hulme and Edwards 1997). NGOs of varying types, including community organizations, membership organizations, private voluntary development groups, and religious institutions, are involved in a sizeable fraction of development activity in the country. In education, for instance, community managed schools educate 40 percent of enrolled students at the primary level and 97 percent at the secondary level (World Bank 1998). The credit activities of Grameen Bank alone reach over 2 million borrowers, and NGOs as a whole account for 65 per cent of all rural credit in the country (Holcombe 1995; World Bank 1996). The achievements of some of the NGOs are also

7. In March, 2003, as part of a broader study of NGOs in Bangladesh, the authors conducted an enumeration of NGOs in the country. The enumeration included all NGOs officially registered with the NGO Affairs Bureau in Dhaka in addition to the registered field offices of Grameen Bank, BRAC, ASA, Proshika, and Caritas. That exercise resulted in a list of 7,643 NGOs in Bangladesh. Field enumeration was also conducted in 35 sample thanas. In those thanas, the number of NGOs based on field enumeration exceeded the number in the administrative list by 21 percent.

striking, particularly in comparison to the government. BRAC, for instance, reportedly had attendance rates of 90 percent in its non-formal primary schools while the corresponding attendance rate for government schools was 15 per cent (Holloway 1998).

3. Data and a Description of NGO Location in Bangladesh

Data

The data used in the analysis are taken from the Bangladesh Bureau of Statistics Household Income and Expenditure Surveys (HIES) of 1995–96 and of 2000. In rural areas, which accounted for 80 percent of the population in 1998, the HIES included both household and community questionnaires, and it is the latter that inquired about the number and types of NGO programs in the sampled rural communities. A total of 252 communities were sampled in each survey. For 248 of them we have observations in both surveys, which allows for the creation of a panel data set. Missing values for the selected variables reduced the sample size about 20 percent in each of the regressions estimated.[8] Up to three NGO programs could be listed in the 1995–96 survey, and up to ten in the 2000 survey. Although the difference in the number of allowable listings might bias the analysis, only 26 communities (10 percent) in 1995–96 used all three allowed slots for NGO programs, suggesting that the problem of truncation is not large. We also use data on the number of votes received in each constituency by the winner and the runner-up, as well as their political affiliations, in the Seventh Parliamentary Elections.

The 1995–96 questionnaire asked if the NGO program in question belonged to one of four major NGOs (Grameen Bank, BRAC, Proshika, and Caritas), and the 2000 questionnaire also inquired about a fifth specific NGO, ASA. In order to analyze the behavioral characteristics of distinct types of NGOs, if an NGO program was named as one of the four identified in the 1995–96 questionnaire, it was called a "Brand NGO"; otherwise it was "Other NGO." (ASA programs were not included in either category because they would be have to be placed in different categories in the two sample years.) Both questionnaires also asked for the type of activity conducted in each NGO program, with choices that included credit, education, skills training, health and family planning, tree planting, water and sanitation, and other. There were small differences between the two questionnaires regarding the language used to characterize these activities, but they did not appear to be substantial enough to lead the same NGO program to be characterized differently in the two surveys.

A variable for the number of government programs was constructed by simply adding extant government programs, from a list of ten, reported in each community. A measure of the remoteness of the community was constructed by adding the reported travel time from the community to both the thana and the district headquarters. Community-level estimates for poverty and literacy were constructed by matching the household and community questionnaires. Household data, along with regional and

8. There were weak correlations between missing values and the variables of interest, suggesting that the missing values are not biasing the estimation results.

temporal deflators, were used to construct several measures of poverty. In constructing the poverty indicators we mainly used the lower poverty line that indicates the very poor, but also checked the results with indicators derived from the upper poverty line. A measure of local political influence was constructed by adding one point to a score if a member, the secretary, or the chair of the local thana council resided in the community, resulting in a score for political influence that ranged from zero to three. In order to control for the role of political factors in NGO location decisions we used data from the 1996 elections to construct a variable for the ratio of votes received by the winner and the runner-up, as well as an indicator variable equal to one if the party winning in the local constituency was the same as the party that won nationally.[9]

Description of NGO location in Bangladesh

Table 1 reports the percentage of communities with at least one NGO program and the average number of programs per community. It shows that there was a marked increase in both the intensity and coverage of development NGOs in Bangladesh in the late 1990s, with increases visible across organizations and sectors of activity. The percentage of rural Bangladeshi communities with at least one NGO programs went from 48 percent in 1995–96 to 91 percent in 2000. For Brand NGOs, the coverage rate more than doubled, going from 39 to 84 percent; for Other NGOs it nearly tripled, going from 18 to 48 percent. The intensity of NGO programs within communities also increased: for all NGOs the average number of programs in 1995–96 was 0.9; in 2000 it was 2.8. The share of those programs that Brand NGOs operated declined from 71 to 63 percent: although Brand NGOs continued to predominate, the number of Other NGOs grew faster over the period.

Credit and education programs drastically increased their presence across and within communities. BRAC and Grameen were the NGOs with the widest scale of operations: in 2000 each was present in more than half the rural communities in the country, and BRAC was approaching an average of nearly one program per rural community.

Tables 2 and 3 characterize the type of activities that NGOs were performing in the sampled communities. In 1995 BRAC was engaged primarily in education programs and only secondarily in credit and health/family planning, but by 2000 the number of BRAC credit programs had increased sevenfold and was larger than the number of its education programs, which themselves had more than doubled.

---

9. These election results can be found at http://www.virtualbangladesh.com/bd_elections_const.html. Two rival political parties dominate Bangladeshi politics, and most civil society organizations, including many development NGOs, are allied with one or the other. The variables for political party were used in this analysis only to control for the role of political alliances in NGO location decisions and were not the main focus of the inquiry. While some political variables were significant in the estimations below, excluding them did not change the findings in any substantial way.

Table 1. Distribution of NGO and Government Programs in Rural Bangladesh, 1995–96 and 2000

	Communities with NGO Program		*Average number of NGO Programs*	
	1995	*2000*	*1995*	*2000*
All NGOs	0.48	0.91	0.92	2.84
	(0.50)	(0.28)	(1.10)	(1.81)
Government Programs	0.75	0.97	1.50	4.53
	(0.43)	(0.15)	(1.28)	(2.00)
Brand NGOs	0.39	0.84	0.65	1.79
	(0.49)	(0.37)	(0.93)	(1.30)
Other NGOs	0.18	0.48	0.19	0.68
	(0.38)	(0.50)	(0.44)	(1.00)
Grameen	0.19	0.50	0.22	0.55
	(0.39)	(0.50)	(0.47)	(0.59)
BRAC	0.24	0.66	0.31	0.89
	(0.43)	(0.47)	(0.58)	(0.84)
Proshika	0.04	0.22	0.07	0.25
	(0.21)	(0.41)	(0.36)	(0.55)
Caritas	0.03	0.09	0.04	0.10
	(0.18)	(0.28)	(0.25)	(0.34)
Credit	0.22	0.81	0.26	1.66
	(0.42)	(0.39)	(0.52)	(1.35)
Education	0.22	0.44	0.22	0.52
	(0.41)	(0.50)	(0.41)	(0.71)
Skills training	0.05	0.07	0.07	0.09
	(0.22)	(0.26)	(0.36)	(0.36)
Family Planning	0.13	0.29	0.13	0.31
	(0.34)	(0.46)	(0.34)	(0.53)
Water and Sanitation	0.03	0.07	0.03	0.07
	(0.16)	(0.25)	(0.16)	(0.29)

Note: standard errors in parenthesis.

Table 2. NGO and type of activity performed, 1995–1996 sample

	Grameen	*BRAC*	*Proshika*	*Caritas*	*Other*	*Missing*	*Total*
Credit	33	12	2	1	11	1	60
Skill training	2	2	2	1	1	9	17
Education	4	36	2	1	3	3	49
Health/Family Planning	2	11	1	2	13	1	30
Water Supply	1	3	0	1	1	0	6
Tree plantation	2	1	4	3	7	3	20
Other	4	4	6	1	8	1	24
Missing	2	2	1	0	1		6
	50	71	18	10	45		212

Table 3. NGO and type of activity performed, 2000 sample

	Grameen	*BRAC*	*Proshika*	*Caritas*	*Other*	*Missing*	*Total*
Credit	119	87	33	11	155	1	405
Skill training	1	11	3	1	4	1	21
Education	4	86	6	4	26	0	126
Health/Family Planning	3	24	9	7	34	1	78
Water Supply	2	2	1	0	12	1	18
Tree plantation	1	6	7	1	13	1	29
Other							
Missing	3	1	3	0	6		13
	133	217	62	24	200		691

BRAC and Other NGOs were responsible for almost all of the increase in NGO education programs. The increases in Other NGO programs were also concentrated in the credit sector. The number of BRAC health/family planning programs doubled; by the year 2000 they represented a little more than 10 percent of all BRAC programs. Interestingly, the share of programs managed by Other NGOs increased in every sector, suggesting growing diversification in NGO providers.

It is clear that the presence and intensity of NGOs at the community level increased on average over the five-year period, but it is not evident from the tables above whether NGOs preferred to locate new programs in communities that already had NGO programs or whether they sought out underserved areas. Table 4 compares, for communities that did and did not have NGO programs in 1995, the average number of programs in the year 2000. In almost every category, by 2000 communities that did not have an NGO program in 1995 had virtually caught up with communities that did have at least one program in 1995, indicating that NGOs tended to locate new programs in previously neglected communities. For some categories (Caritas, credit, and skills training), concentrations in communities that were not served by NGOs in 1995 had by 2000 in fact exceeded concentrations in communities with programs in 1995. On average, communities that had no NGOs in 1995 had 2.72 NGO programs in 2000, more than the 1995 average among communities with programs, which was 1.9.

Table 4. Average number of programs in 2000 by type and NGO

	Communities with at least one NGO program in 1995		*Communities with no NGO programs in 1995*	
Any NGO program	3.05	[1.9]	2.72	
	(1.70)		(1.94)	
Government	4.55	[1.82]	4.58	[1.24]]
	(2.01)		(2.01)	
Grameen	0.64	[0.46]	0.48	
	(0.60)		(0.57)	
Brac	1.01	[0.66]	0.82	
	(0.83)		(0.83)	
Proshika	0.30	[0.15]	0.21	
	(0.64)		(0.45)	
Caritas	0.10	[0.09]	0.11	
	(0.33)		(0.37)	
Credit	1.66	[0.55]	1.68	
	(1.37)		(1.39)	
Education	0.60	[0.45]	0.47	
	(0.81)		(0.62)	
Family Planning	0.39	[0.28]	0.26	
	(0.58)		(0.48)	
Skill training	0.07	[0.15]	0.10	
	(0.26)		(0.44)	
Water supply	0.09	[0.05]	0.07	
	(0.29)		(0.31)	
Tree plantation	0.13	[0.17]	0.11	
	(0.36)		(0.34)	

Note: Standard errors are in parentheses. For communities that had NGO programs in 1995, the average number in 1995 is in brackets.

Table 5. Average change in the number of programs

Program X	*Communities with at least one program X in 1995*	*Communities without program X in 1995*
Any NGO program	1.16	2.72
	(1.70)	(1.94)
Government	2.83	3.78
	(2.15)	(2.02)
Grameen	–0.26	0.48
	(0.61)	(0.57)
Brac	–0.2	0.83
	(0.86)	(0.84)
Proshika	–0.55	0.23
	(1.13)	(0.49)
Caritas	–0.63	0.09
	(0.92)	(0.31)
Small	–0.48	0.68
	(0.82)	(1.07)
Credit	0.86	1.57
	(1.70)	(1.31)
Education	–0.21	0.45
	(1.03)	(0.59)
Family Planning	–0.53	0.29
	(0.51)	(0.53)
Skill training	–1.42	0.09
	(0.79)	(0.38)
Water supply	–0.83	0.08
	(0.41)	(0.30)
Tree plantation	–0.89	0.12
	(0.32)	(0.36)

Table 5 addresses a slightly different set of questions: when NGOs made program placement decisions between 1995 and 2000, did they prefer communities where they already had programs or did they avoid those communities? For every NGO program brand and type in column 1 of the table,[10] column two lists the net change in programs per community among communities that had at least one NGO program of that brand or type in 1995, and column two lists the net change in communities that had no programs of that brand or type in 1995. In the first column of the table, almost every value is negative; and in the second column, every value is positive. That means that in most cases, NGOs reduced program intensity in communities where they were operating and increased program intensity in communities where they were not operating. The major exception involves credit programs, which increased in intensity in communities where

10. As terms of art, we use NGO "brand" to refer to the owner of the NGO program irrespective of the sector in which it operates (brands are Grameen, BRAC, Proshika, Caritas, which each have separate ownership and governance; and small, which is an agglomeration of all other NGOs); and we use NGO "type" to refer to the different sectors of NGO program activity irrespective of ownership (types are credit, education, etc.).

they were present in 1995 (though not as much as they did in communities where they were not present). Because, as shown in tables 2 and 3, credit programs are so widespread in the country (59 percent of NGO programs in the sample focus on credit), the positive value on credit in column 1 is the dominant effect, with the result that communities with at least one NGO program in 1995 increased their number of programs by 1.16 in 2000 even though all of the other values (apart from credit) are negative. A similar pattern is evident in the location of new government programs: communities that did not have a government program in 1995 experienced a greater increase, although the difference was not nearly as large as with NGO programs.

To summarize the discussion so far, there are two distinct (though possibly related) findings. First, table 4 shows that every type and brand of NGO increased its presence more in communities that had no NGO programs in 1995 than in communities that already had programs. Why? Perhaps those communities that had no NGO programs in 1995 were poorer or more remote, and NGOs increased efforts to reach needy communities over the period; or perhaps donors rewarded NGOs who went to neglected communities, and the NGOs sought to distinguish themselves by going where other NGOs were not operating. Second, table 5 shows that between 1995 and 2000, every NGO brand and type (with the exception of credit programs) reduced coverage in communities in which it was already operating, and increased programs in communities where it was not operating. Again, two kinds of explanation are possible. Perhaps each NGO shifted its focus to regions it had neglected, and did so by shifting resources from areas that were well covered (except credit programs, which increased coverage everywhere); or perhaps donors rewarded NGOs that reduced duplication of efforts and established programs in new areas. The estimations below test these two accounts by examining whether indicators of community well-being were related to changes in NGO program intensity between 1995 and 2000. It is important, here, however, to rule out one another potential explanation for the changes in program coverage: as table 6 shows, NGOs were not moving to a particular region of the country. All five divisions experienced similar increases in NGO program coverage and intensity during this period. Along with table 1, the table also documents the spatial variation of NGO concentration across the country, variation that we exploit in this analysis of NGO location. Before turning to the estimations, however, the next section sharpens our account of NGO motivation with two simple models of behavior.

4. Alternative Accounts of NGO Motivation

This section develops two simple and highly stylized models of how NGOs might decide where to locate a new program. The models characterize two forms of extreme behavior on the part of NGOs: purely opportunistic and purely benevolent. The section shows how these two kinds of NGOs choose their locations in accordance with their different incentives. Predictions from these stylized models are later used to interpret our empirical results.

Table 6. Average presence and number of programs by NGO in the 5 Divisions

	Average Number of NGOs		*Presence of NGOs*	
	1995	*2000*	*1995*	*2000*
Barisal	0.78	2.78	0.43	0.99
	(1.02)	(1.36)	(0.50)	(0.12)
Chittagong	0.64	1.81	0.41	0.76
	(0.92)	(1.42)	(0.50)	(0.43)
Dhaka	1.20	2.93	.56	0.96
	(1.29)	(1.44)	(0.51)	(0.19)
Khulna	1.10	3.62	0.54	0.92
	(1.13)	(2.28)	(0.50)	(0.27)
Rajshahi	1.20	3.25	0.53	1.00
	(1.28)	(1.57)	(0.51)	(0.00)

Note: Standard errors in parenthesis.

The opportunistic approach

Suppose that there are two villages, A and B, and two NGOs, N_1 and N_2. In village A there is a program run by N_1, in village B none. N_2 wants to start a program and has to decide whether to go to village A or B. Let p be the probability of success and $(1-p)$ the probability of failure, where p is a measure of the ability of the NGO. Assume that the NGOs depend on outside funding. The donor looks at the performance of the NGO and decides whether to give it money and how much. The contract specifies a payment of x in case of success and y in case of failure, where $x > y$. When there is a unique NGO acting in a village, then the donor can determine the contribution of the NGO towards the outcome; however, if there are several NGOs then the donor cannot assess the contribution of each to the outcome, in which case, for simplicity, we assume the donor gives a lump sum payment z independent of the actual outcome, where x>z>y.

Given this contract, the expected utility to the NGO from acting alone is

$$U(alone)=pu(x)+(1-p)u(y).$$

If instead the NGO goes to a community where there is already another NGO then its expected utility is

$$U(joint)=u(z).$$

The entering NGO will choose to start the program in the village without one, if the following condition holds:

$$U(alone)> U(joint);$$

that is,

$$u(x)–u(y)>[u(z)–u(y)]/p, \quad (1)$$

which tells us that the NGOs that decide to go alone are the ones with an ability such that

$$p^* > [u(z)–u(y)]/[u(x)–u(y)]. \quad (2)$$

The rate of change in this ability cutoff with respect to the rate of change the contract (reward level) is:

$$dp^*/dx=[(u(y)–u(0))/(u(x)–u(y))^2]*u'(x) < 0;$$

that is, the cutoff point decreases as the reward increases. That means that as the contract becomes more "positive," the expected level of talented needed to work alone is lower. Also, we have

$$dp^*/dy=[(u(0)–u(x))/(u(x)–u(y))^2]*u'(y) < 0,$$

which implies that as the punishment gets harsher (y decreases), the cut off in ability goes up: the likelihood of success has to increase if the NGO is to act alone.

Two extreme cases help to clarify the model. Suppose that we have a contract in which the agent is rewarded in the event of a positive outcome, but is not punished in the event of a negative one. This means that $y = z$. Then condition (1) reduces to:

$$u(x)>u(y),$$

which is always true by definition. Hence, in the case where there is no punishment for a negative outcome, all agents have an incentive to take risky action and start a program where others are not active. On the other hand if $x = z$ (there is no reward for a positive outcome), then

$$u(y)>u(z),$$

which is never true. Hence, if there is only punishment in the event of a negative outcome and no reward in for a positive outcome, all entrant NGOs would start programs in communities that already had them. More generally, equation (2) shows that the higher (lower) the reward for success, represented by x, relative to the punishment from failure, represented by y, the more (less) likely an NGO is to go alone.

This simple example shows that contract specification can affect the location decisions of NGOs. All NGOs, to the extent they behave opportunistically, will exhibit some tendency to act alone if they are rewarded for their achievements. The model also suggests that donor dependence might affect NGO choices. Less established NGOs, which are in search of but do not have much donor financing that are less dependent on donors, and that face less downside risk to their reputations than established NGOs, will have more of an incentive to distinguish themselves by going into a village where their work is more easily observed by donors.

Although it is not formally modeled here, it is easy to imagine how limits on information in contracts between donors and NGOs might further affect location choices. The suggestion is consistent with the idea that principal-agent contracts are suboptimal when outcomes are unobservable (or difficult to measure), and that as a result agents skew their efforts towards low return, observable outputs and away from high return, unobservable ones. Here donor dependence might push NGOs to expand their coverage as much as possible if donors do not observe actual outcomes (since they are difficult to measure) and instead use other indicators of effort, such as widespread presence on the territory or "coverage," to evaluate NGOs. In that case, opportunistic NGOs will locate new programs in regions where they were not located in the previous time period, but they will be less sensitive to the number of other NGOs in the communities in which they locate and insensitive to poverty levels.

The benevolent approach

A benevolent approach emphasizes that NGOs will locate in communities in which they can maximize their impact; where, in other words, in which the marginal product of their programs are highest. To accomplish that, in addition to locating on the basis of village characteristics, NGOs will take into account possible interactions with existing organizations. In particular, NGOs will in choosing a village incorporate information on whether existing programs are complementary to or substitutes for its own programs.

Suppose that the change in poverty or in any other outcome of interest were to depend on the initial level of poverty, *p*, and the number of programs in the village. A benevolent NGO will set the number of its own programs in a community to maximize the desired outcome (poverty reduction, for example). The problem for NGO i is to:

$$\text{choose } n_i \text{ to } \textit{max}\ y=f(p, n_i, n_{-i}).$$

where y represents poverty reduction or another outcome of interest, n_i is the number of programs of NGO i in the village, n_{-i} is the number of programs by other NGOs, and p is the existing level of poverty. The optimal number of programs in a village for an NGO will then depend on the interaction between its own programs and the existing programs of other NGOs, for a given level of poverty. If $f_{n\text{-}i,\, ni} > 0$ then programs of other NGOs are complementary to its own, and, for a given level of poverty, the more programs of other NGOs already in the village, the more programs that NGO i will want to place in the community. On the other hand, if other types of programs are substitutes, then one would expect to see the existence of other types of NGO programs to be negatively related to the likelihood of the NGO to place a new program in the village. Again, these results hold for a given level of poverty: other factors being equal, a benevolent NGO would go to a community with a higher level of poverty, where its marginal product is likely higher. On this line of thinking, what really matters for NGO location is whether two programs are substitutes or complements, irrespective of who owns the programs. For illustration, it seems reasonable to think that an NGO will not want to start a credit program in a

community in which there are other credit programs in place since the marginal effect of an extra one, ceteris paribus, is small. Rather, it might prefer to start the credit program where there is an existing education program if education programs combined with credit programs are the best formula for bringing people out of poverty.

Table 7 summarizes the discussion above. For both models of NGO behavior, it lists the predicted signs on right-hand side variables in an estimation in which the left-hand side variable is the change in the number of NGOs in a given community. For all NGO programs, the opportunistic model predicts a negative sign on number of NGO programs in 1995 (because NGOs will go to neglected areas in order to distinguish themselves in the eyes of donors), as does the benevolent account (because NGOs will seek out underserved communities). The key difference is on the sign of coefficients for the poverty and well being variables. For Other NGO programs, which are less well established than Brand NGOs, both models again predict negative signs for number of NGO programs; but there might evidence that Other NGOs are more likely to go to communities that have few programs (in order to distinguish themselves in the eyes of donors). Also, a critical difference will again involve the variables for poverty and well-being. For the estimations involving NGO brands, the key difference between the models (in addition to poverty and well-being) is that in the benevolent model NGOs should not distinguish between the existence of their own and other NGO programs, avoiding both alike in order to reach underserved communities; but under the opportunistic model the coefficient on others' programs will be not be significant (because NGOs want to show donors how wide the coverage of their own programs is, irrespective of what others are doing, or because the bigger NGOs, to whom the brand labels apply, have little incentive to distinguish themselves by going into communities where there are no other programs). Finally, in the estimations involving NGO types, the benevolent model is indeterminate on the sign for programs of other types, depending on whether they are complements or substitutes, and the opportunistic model predicts an indeterminate (depending on whether NGOs want to distinguish themselves by going alone) or not significant (if NGOs are only interested in the coverage of their own programs irrespective of whether there are other programs in communities) sign. The key difference again involves poverty and well-being. The empirical section below tests these accounts of NGO program location under the two different accounts of NGO motivation.

Table 7. Predicted sign, magnitude, and significance of determinants of program location under different models of NGO behavior

Variable (in 1995)	*Opportunistic model*	*Benevolent model*
All NGO Programs		
• Number of NGO programs	negative	negative
• Poverty and well-being	not significant	positive
Other NGO programs		
• Number of NGO programs	negative	negative
• Poverty and well-being	not significant	positive
NGO brands (BRAC, etc.)		
• Number of own programs	negative	negative
• Number of others' programs	not significant or negative	negative
• Poverty and well-being	not significant	positive
NGO types (credit, etc.)		
• Number of programs of own type	negative	negative
• Number of programs of other types	not significant or indeterminate	indeterminate
• Poverty and well-being	not significant	positive

5. Empirical Specification and Main Findings

Specification

Our estimates of the determinants of NGO program location are based on the following regression model:

$$N_{ijt+5} - N_{ijt} = \beta_0 + \beta_1 N_{ijt} + \beta_2 N_{i(-j)t} + \beta_3 Y_{it} + \Sigma_k \beta_k W_{ikt} + \Sigma_h \beta_h X_{it} + \mu_g + \varepsilon_{ijt+5}$$

where N_{ijt} is the per capita number of programs *j* in community *i* in year *t*; $N_{i(-j)t}$ is the number of per capita NGO programs excluding those of type *j* in community *i* in year *t*, W_{it} is a vector of community characteristics in year *t* in community *i* (remoteness, number of government programs, literacy, population, political variables), X is a set of measures of poverty or need in the community (log of per capita consumption, poverty gap, agricultural wage for males) and μ_g represents a geographical-level[11] fixed effect that captures omitted or unobservable location-specific factors. The variables for number of programs are estimated in per capita terms because, in both opportunistic and benevolent accounts, NGOs should be concerned with community population size in deciding where to locate. The per capita numbers also normalize the variables, allowing for greater variation and more precise estimates. The substantive results do not change if absolute numbers of programs instead. Note also that the left-hand side variable is the change in

11. There are 8 different geographical areas in which Bangladesh has been divided.

the number of programs in each community, which is a result of both entry and exit decisions on the part of NGOs. We interpret entry and exit decisions in the same light – both reflect the NGOs' choices on where to prioritize program strength. We estimate the regression by standard ordinary least squares.[12]

The results below are interpreted in light of the benevolent and opportunistic accounts of NGO motivation. In particular, a negative coefficient on "own" programs *and* on "other" programs would suggest a benevolent NGO that simply locates in communities without existing programs. Under a benevolent account of NGO behavior, one would also expect to find positive and significant coefficients on indicators of need.

Main findings

Table 8 shows the results for changes between 1995 and 2000 in the per capita number of programs run by any NGO, by Brand NGOs, and by Other NGOs. In all three regressions, the coefficients on the per capita number of NGO programs of the same kind extant in 1995 were significant and negative. This indicates a dispersion effect: NGOs of all sizes entered areas in which they were not present and/or left communities in which they were already working. This is consistent with both the opportunistic account (if donors rewarded broader coverage) and the benevolent account (if NGOs were moving to under-served areas) of NGO motivation. But indicators of community well-being, including poverty, had no effect on program location in any of the regressions, suggesting that aggregate poverty levels were not a significant factor in NGO program location decisions. (Perhaps NGOs were targeting the poorest individuals within the selected communities, but the available data could not test that possibility.) Brand and Other NGOs differed in one area. The regressions showed that Brand NGO programs were moving to the same places as new government programs, and that Other NGO programs were not. Brand NGOs, in other words, were not substituting for government programs but instead following them.

While these results pooled several kinds of programs and organizations, table 9 presents results from regressions that disaggregate NGOs by type, and table 10 presents results that disaggregate by brand, in order to analyze the choices of different program types and brands, which might be influenced by different factors. In table 9, which analyzes six types of programs—credit, education, health/family planning, skill training, water supply and tree plantation—the coefficients on the per capita number of programs of the same type in 1995 were always highly significant and negative. At the same time, none of the coefficients on the numbers of NGO programs of other types were significant. This result, as table 7 above shows, is consistent with both opportunistic and benevolent behavior. One might argue, on the other hand, that these results are driven by neither opportunistic nor benevolent behavior but merely by programmatic necessities:

12. To mitigate problems related to unobserved village specific effects, we ran regressions in which we controlled for the religious composition of the population, types of earning activities, quality of the roads, electrification of the village, existence of telephones, and sources of drinking water. In no case did the substantive results change.

Table 8. NGOs and government programs

	NGO		*Brand NGOs*		*Other NGOs*	
PC number of NGO programs in 1995	–0.821	***				
	(0.170)					
PC number of government programs	0.162	**	0.128	**	0.031	
	(0.081)		(0.053)		(0.040)	
PC number of Other programs			–0.092		–1.245	***
			(0.333)		(0.177)	
PC number of Brand programs			–0.656	***	–0.017	
			(0.126)		(0.104)	
Poverty	–1.340		–0.352		–0.342	
	(1.591)		(1.004)		(0.625)	
Cost	–0.020		–0.023		–0.022	
	(0.043)		(0.025)		(0.025)	
Per capita consumption	–0.125		–0.001		–0.080	
	(0.403)		(0.278)		(0.135)	
Percentage of landless	0.091		0.142		0.207	
	(0.380)		(0.234)		(0.169)	
Literacy	–0.001		–0.002		–0.003	*
	(0.004)		(0.003)		(0.002)	
Constant	1.878		0.553		0.783	
	(2.689)		(1.800)		(0.922)	
Political Control	Yes		Yes		Yes	
Geographical Fixed Effect	Yes		Yes		Yes	
N	206		205		205	
R squared	0.302		0.280		0.316	

NGOs open programs in a village, create local know-how, and then move to other villages. But while this explanation might be relevant to NGO programs dedicated to limited projects, such as water supply and tree plantation, it is less plausible for sectors where community needs are more long-term, such as credit, education, and health/family planning. Indicators of poverty and community well-being were not significant for credit and education programs, and were actually negative and significant for skills training programs. There was some evidence for the benevolent account in the regressions – the coefficients on percentage of landless were significant at 10 percent for water supply and tree plantation programs, and the coefficient on per capita consumption was significant at 10 percent for health/family planning programs—but in general the findings were more somewhat more consistent with the opportunistic account.

Table 9. Results by type of program

	Credit	*Education*	*Family planning*	*Skill training*	*Water supply*	*Tree plantation*
PC number of same type of program in 1995	–0.954 ***	–0.638 ***	–0.869 ***	–1.077 ***	–1.032 ***	–0.998 ***
	(0.290)	(0.150)	(0.162)	(0.036)	(0.144)	(0.039)
PC number of other programs in1995	0.012	0.041	0.026	–0.024	0.002	0.000
	(0.166)	(0.058)	(0.052)	(0.022)	(0.023)	(0.000)
PC number of government programs	0.158 **	–0.029 *	0.021	0.005	0.008	0.000
	(0.069)	(0.020)	(0.026)	(0.012)	(0.012)	(0.000)
Poverty	–1.020	0.207	–0.304	–0.244 *	0.043	0.000
	(1.536)	(0.379)	(0.304)	(0.132)	(0.163)	(0.00)
Cost	–0.018	–0.024 **	0.020 *	–0.004	0.006	0.000
	(0.034	(0.012)	(0.012)	(0.004)	(0.005)	(0.000)
Per capita consumption	–0.018	0.082	–0.091	–0.093 **	0.002	0.000 *
	(0.313)	(0.110)	(0.091)	(0.041)	(0.037)	(0.000)
Percentage of landless	–0.065	0.014	0.120 *	–0.114	0.077 *	0.000 *
	(0.330)	(0.080)	(0.073)	(0.073)	(0.040)	(0.000)
Literacy	0.001	–0.000	–0.000	0.000	–0.001	–0.000
	(0.003)	(0.001)	(0.001)	(0.000)	(0.001)	(0.000)
Constant	0.916	–0.363	0.568	0.665	–0.018	–0.002
	(2.171)	(0.715)	(0.572)	(0.269)	(0.233)	(0.001)
Political Control	Yes	Yes	Yes	Yes	Yes	Yes
Geographical Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes
N	206	205	205	207	205	204
R squared	0.250	0.290	0.329	0.435	0.175	0.678

Robust standard errors in parentheses
* Significant at 10%; ** significant at 5%; *** significant at 1%.

Whereas a negative coefficient on the per capita number of own programs and an insignificant coefficient on the number of other kinds of programs is consistent with the benevolent account in estimates for NGO types, it is not consistent with the benevolent account in estimates for NGO brand. In other words, if NGOs were purely benevolent, they would treat the presence of programs of other NGOs in the same way they treated their own: one would expect the coefficients β_1 and β_2 to be the same. Table 10 shows that the coefficients are not the same. The coefficients on the per capita number of own programs in 1995 were always negative and highly significant, suggesting that NGOs preferred to locate their programs in communities where they were not present; but the coefficients on per capita number of other NGO programs were never significantly different from zero, suggesting that NGOs were not concerned whether other NGO brands were already operating in a given area. This finding is consistent with the opportunistic account of NGO behavior in which NGOs spread out to new regions because donors use coverage as an indictor of NGO effort. A proponent of the benevolent model might reply that perhaps there is a higher degree of substitutability between programs of the same type, and the different NGO brands basically offer programs of just one type. As tables 2 and 3 show, that might be true for Grameen Bank, whose programs are predominantly in credit, but not for the other NGOs, which operate a variety of different types of programs. Table 10 also shows that the coefficients on poverty were not

Table 10. Brand specific results

	GRAMEEN		BRAC		PROSHIKA		CARITAS	
PC number of own program in 1995	–0.620	***	–0.783	***	–1.061	***	–0.841	***
	(0.134)		(0.123)		(0.115)		(0.188)	
PC number of other programs in1995	0.011		0.159		–0.015		–0.036	
	(0.075)		(0.154)		(0.030)		(0.021)	
PC number of government programs	0.122	***	–0.031		0.000		0.047	
	(0.038)		(0.036)		(0.016)		(0.030)	
Poverty	–0.429		0.345		–0.360		0.048	
	(0.458)		(0.668)		(0.269)		(0.172)	
Cost	–0.011		–0.018		0.001		0.000	
	(0.012)		(0.016)		(0.008)		(0.006)	
Per capita consumption	0.013		0.060		–0.094		–0.036	
	(0.120)		(0.182)		(0.070)		(0.045)	
Percentage of landless	–0.119		0.005		–0.014		–0.011	
	(0.118)		(0.127)		(0.072)		(0.033)	
Literacy	0.001		–0.000		0.002		0.001	
	(0.001)		(0.002)		(0.001)		(0.001)	
Constant	0.275		–0.094		0.675		0.219	
	(0.789)		(1.157)		(0.473)		(0.289)	
Political Control	Yes		Yes		yes		Yes	
Geographical Fixed Effect	Yes		Yes		yes		No	
N	205		205		197		205	
R squared	0.309		0.304		0.290		0.228	

Robust standard errors in parentheses.
* Significant at 10%; ** significant at 5%; *** significant at 1%.

significantly related to NGO program location, nor were percentage of population landless and per capita consumption. The coefficient on percentage of landless had different signs in the different regressions but was never significant. Several robustness checks, including different poverty measures and tests for multi-collinearity among the indicators of well-being, confirmed these results.[13] Again, these results show that NGOs were not targeting poor communities in location decisions (although, of course, they might have been focusing on the neediest individuals within those communities). Finally, in the Grameen Bank regression there was a positive and significant coefficient on the per capita number of government programs, but this coefficient was not significant in the other regressions.

To this point, interpreting the results has been complicated by the need to allow for both brand-specific and type-specific effects. Although sample sizes are smaller, the data do permit some analysis of location decisions by program type for each brand. Table 11 presents results for credit programs run by BRAC, Grameen Bank, Proshika, and other

13. The poverty measure used in the regressions was the poverty gap based on the lower poverty line. Replacing it with the upper poverty line, the headcount ratio, and Foster-Greer-Thorbecke indices did not change the signs or significance of the coefficients. Correlations among the regressors were very low in each case except for that between poverty and the logarithm of per capita expenditure. When the regressions were estimated by including one indicator at a time and then adding the others sequentially, the main results remained robust to all specifications.

NGOs. In the regression for BRAC, the coefficient on the number of its own credit programs present in 1995 was negative and highly significant coefficient; but the coefficient on the number of credit programs run by other NGOs was positive and highly significant. This suggests some kind of "pooling" or jamming behavior. If credit programs were more likely to be substitutes for each other rather than complements, BRAC, in establishing a new program, behaved more like an opportunistic agent. BRAC, a well-established organization, was perhaps less in need of building a reputation and might indeed have had some incentive to take lower risks by going where credit programs already existed. In the regression for other NGOs, the coefficient on the presence of other credit programs was negative and significant at the 5 percent level. This is consistent with the idea that small NGOs take risks in order to distinguish their development work from the work of other NGOs, and that they do this by going to areas that do not already have programs. Proshika and Grameen established credit programs where they did not already have programs, but were not sensitive to the activities of other NGOs. This was also consistent with the opportunistic account. Again, measures of community well-being did not appear to influence NGO credit program location decisions.

Table 12 presents brand-specific results for education and health/family planning programs run by BRAC and other NGOs. (Sufficient observations were available only for those categories). For BRAC education programs, the coefficient on the per capita number of BRAC's own education programs in 1995 was significant and negative, the coefficient on the presence of education programs run by other NGOs was not significant, the coefficients on community well being and literacy were not significant, and the coefficient on the cost variable was negative and highly significant. With the exception of

Table 11. Results for credit program run by different NGOs

	Credit			
	BRAC	GRAMEEN	PROSHIKA	SMALL
PC number own type and brand	–1.176 ***	–1.038 ***	–1.019 ***	–1.263 ***
	(0.171)	(0.376)	(0.353)	(0.348)
PC number same type but other brand	0.371 ***	–0.828	–0.026	–0.309 **
	(0.151)	(0.845)	(0.047)	(0.148)
Poverty	0.001	–0.004	–0.000	–0.002 *
	(0.001)	(0.004)	(0.000)	(0.001)
Cost	0.000	–0.000	0.000	0.0000
	(0.000)	(0.000)	(0.000)	(0.0000)
Per capita consumption	0.001	–0.000	0.000	–0.0003
	(0.000)	(0.000)	(0.000)	(0.0003)
Percentage of landless	0.000	–0.001	0.000	–0.0001
	(0.000)	(0.000)	(0.000)	(0.0003)
Constant	–0.001	0.003	0.000	0.0029
	(0.001)	(0.003)	(0.000)	(0.0022)
Political Control	Yes	Yes	Yes	yes
Geographical Fixed Effect	Yes	Yes	Yes	yes
Observations	207	207	207	209
R-squared	0.293	0.064	0.160	0.236

Robust standard errors in parentheses.
* Significant at 10%; ** significant at 5%; *** significant at 1%.

the cost variable, the regression for BRAC health and family planning programs presented similar results. These findings were consistent with the opportunistic account. In the regressions for education and health/family planning programs run by other NGOs, the coefficients on the per capita number of same type programs run by "other" NGOs were negative and significant, as expected under both the opportunistic and benevolent accounts. The coefficient for the per capita number of other education programs run by a different NGO (that is, by Grameen Bank, BRAC, Proshika, or Caritas) was positive and significant at 10 percent, which is not consistent with the opportunistic account; but for health and family planning programs, that coefficient was significant and negative, which is consistent with the opportunistic account. The indicators of need had no bearing on location decisions. Overall, these findings provide support for the hypothesis that NGOs distinguish between the existence of their own types of programs and those of other NGOs when making location decisions; and that they do not focus on community-level poverty.

6. Conclusions

Economic theory has a simple, coherent account of firm behavior (profit maximization), and public choice theory and institutional economics have described a coherent, if more contested, set of stories regarding decisionmaking and resource allocation in the public sector. An account of the behavior of non-profit organizations, such as development NGOs, however, remains underdeveloped, largely because there have been few empirical tests of the range of objective functions that theory has offered

Table 12. Results for education and health/family planning programs run by different NGOs

	Education				*Health/Family Planning*			
	BRAC		SMALL		BRAC		SMALL	
PC number own type and brand	–0.828	***	–0.994	***	–0.832	***	–1.035	***
	(0.111)		(0.060)		(0.193)		(0.124)	
PC number same type but other brand	0.027		0.297	*	0.141		–0.094	*
	(0.157)		(0.172)		(0.182)		(0.049)	
Poverty	0.000		0.000		0.000		–0.001	
	(0.001)		(0.000)		(0.000)		(0.000)	
Cost	–0.000	***	0.000		0.0000		0.000	
	(0.000)		(0.000)		(0.0000)		(0.000)	
Per capita consumption	0.000		0.000		0.000		0.000	
	(0.000)		(0.000)		(0.000)		(0.000)	
Percentage of landless	–0.000		0.000		0.000		0.000	
	(0.000)		(0.000)		(0.000)		(0.000)	
Literacy	0.000		0.000	***	0.000		0.000	
	(0.000)		(0.000)		(0.000)		(0.000)	
Constant	–0.000		0.000		–0.000		0.000	
	(0.001)		(0.000)		(0.000)		(0.000)	
Political Control	yes		yes		Yes		Yes	
Geographical Fixed Effect	yes		yes		Yes		Yes	
Observations	207		229		229		229	
R-squared	0.381		0.311		0.286		0.230	

Robust standard errors in parentheses.
* Significant at 10%; ** significant at 5%; *** significant at 1%.

for them. This paper is an attempt to investigate the determinants of NGOs location in Bangladesh using household and community level data. Two crucial elements that have to be accounted for when studying NGO behavior are reliance on donor funding and the existence of other NGO programs in the same location.

The analysis does not find strong support for the claim that NGOs were targeting poverty. In fact, in most regressions the coefficients on indicators of need (poverty gap, literacy, percentage of landless) were not significant. This is not to suggest that beneficence plays no role in NGO activities. There are countless individuals in Bangladesh, as in other countries, for whom volunteerism and personal sacrifice, a special concern for the poor irrespective of where programs are located, and the appeal of a higher calling are why they work in NGOs. Those values are also important, however, to many outside the sector, including many in Bangladeshi government. The point being made here is that NGOs, as organizations, are not so permeated with altruism that it is apparent in their location decisions. It is possible, of course, that the targeting of human needs other than poverty, such as social exclusion, guides their location choices; and those cannot be easily captured. The findings also, of course, do not rule out the possibility that despite the absence of targeting at the community level, there was targeting taking place within the community, although evidence from other studies suggests that NGOs might not be targeting the "ultra-poor" (Amin, Rai, and Topa 2002; Rahman and Razzaque 2000)

A striking result in the analysis is the fact that the presence of a program in a community had a strong negative effect on the flow of programs of the same type or run by the same NGO. In fact, in all of the regressions the coefficient on the per capita number of NGO present in the community had a negative and highly significant effect on the change in the number of that same program. This result cannot be explained simply by decreasing returns to NGO programs of the same kind. If that were the case, one would expect that the effect of an NGOs' own programs would be equal to the effect of comparable programs run by other NGOs. And that should also be true in the regressions for NGO brand, where the substitutability argument was weaker; but that turned out not to be the case. The presence of credit programs run by other NGOs had a positive effect on the decision to locate a credit program in that same location. The same result held in the case of education programs run by other NGOs. The findings suggest that contracts with donors, implicit or explicit, probably play a crucial role in determining the incentives that affect NGO location choices.

References

Amin, Sajeda, Ashok S. Rai, and Giorgio Topa. 2003. "Does Microcredit Reach the Poor and Vulnerable? Evidence from Northern Bangladesh." *Journal of Development Economics* 70(1): 59-82.

Easterly, William. 2002. "The Cartel of Good Intentions: The Problem of Bureaucracy in Foreign Aid." *The Journal of Policy Reform* 5(4): 223-50.

Edwards, M., and D. Hulme. 1995. "NGO performance and accountability." In M. Edwards and D. Hulme, eds., *Beyond the Magic Bullet: NGO Performance and Accountability in the Post-Cold War World*. West Hartford, CT: Kumarian Press.

Galaskiewicz, Joseph, and Wolfgang Bielefeld. 2001. "The Behaviour of Non-Profit Organisations." In Helmut K. Anheier, ed. *Organisational Theory and the Non-Profit Form*: *Proceedings of a seminar series at the LSE Centre for Civil Society.* Report No. 2. London: London School of Economics, Centre for Civil Society.

Gibbs, Christopher, Claudia Fumo, and Thomas Kuby. 1999. "Non-governmental organizations in World Bank-supported Projects: A Review" World Bank Operations Evaluation Department, Washington, D.C.

Glaeser, Edward L., ed. 2003. *The Governance of Not-for-Profit Organisations*. University of Chicago Press.

Hadi, Abdullahel. 2000. "A Participatory Approach to Sanitation: Experience of Bangladeshi NGOs." *Health Policy and Planning* 15(3): 332-37.

Hashemi, Sayed. 1996. "NGO Accountability in Bangladesh: Beneficiaries, Donors and the State." In Michael Edward and David Hulme, eds. *Beyond the Magic Bullet: NGO Performance Accountability in the Post-Cold War World.* West Hartford, Conn.: Kumarian Press.

Holcombe, Susan. 1995. *Managing to Empower: The Grameen Bank's Experience of Poverty Alleviation*. Atlantic Highlands, New Jersey: Zed Books.

Holloway, Richard. 1998. *Supporting Citizens' Initiatives: Bangladesh's NGOs and Society*. London: Intermediate Technology Publications.

Hulme, David, and Michael Edwards. 1997. *NGOs, States and Donors: Too Close for Comfort*? New York, NY.: St. Martin's Press.

Khandker, Shahidur R., M. A. Baqui Khalily, and Zahed H. Khan, eds. 1996. *Credit Programs for the Poor: Household and Intrahousehold Impacts and Program Sustainability.* Volume 2. Proceedings of the workshop, March 19-21, 1995, Dhaka, Bangladesh. Bangladesh Institute of Development Studies and World Bank.

Matin, Nilufar, and Muhammad Taher. 2001. "The Changing Emphasis of Disasters in Bangladesh NGOs." *Disasters* 25(3): 227-39.

Morduch, Jonathan. 1999a. "The Role of Subsidies in Microfinance: Evidence from the Grameen Bank." *Journal of Development Economics* 60(1): 229-48.

_____. 1999b. "The Microfinance Promise." *Journal of Economic Literature* 37(4): 1569-1614.

_____. 2000. "The Microfinance Schism." *World Development* 28(4): 617-29.

Pitt, Mark M., Mark R. Rosenzweig, and Donna M. Gibbons. 1993. "The Determinants and Consequences of Government Programs in Indonesia" *The World Bank Economic Review* 7(3): 319-48.

Rahman, Atiur, and Abdur Razzaque. 2000. "On Reaching the Hardcore Poor: Some Evidence on Social Exclusion in NGO Programmes." *The Bangladesh Development Studies* 26(1): 1-35.

Rahman, Mohammed M. 2002. "Problems of the NGOs in Housing the Urban Poor in Bangladesh." *Habitat International* 26: 433-51.

Ravallion, Martin, and Quentin Wodon. 2000. "Banking the Poor? Branch Location and Nonfarm Rural Development in Bangladesh." *Review of Development Economics* 4(2): 121-39.

Rosenzweig, Mark R. and Kenneth I. Wolpin 1986. "Evaluating the Effect of Optimally Distributed Public Programs: Child Health and Family Planning Interventions." *The American Economic Review* 76(3): 470-82.

Smillie, Ian, and John Hailey. 2001. *Managing for Change: Leadership, Strategy & Management in Asian NGOs*. Sterling, VA.: Earthscan Publications.

Sooryamoorthy, R and K. D. Gangrade. 2001. *NGOs in India.* West Port, Connecticut: Greenwood Press.

Stiles, Kendall. 2002. "International Support for NGOs in Bangladesh: Some Unintended Consequences." *World Development* 30(5): 835-46.

Vivian, J. 1994. "NGOs and sustainable development in Zimbabwe: No magic bullets." *Development and Change* 25: 181-209.

White, S. 1999. "NGOs, Civil Society, and the State in Bangladesh: The Politics of Representing the Poor." *Development and Change* 30: 307-26.

Wood, G. D. 1997. "States Without Citizens: The Problem of the Franchise State." In M. Edwards and D. Hulme, eds., *NGOs, States and Donors: Too Close for Comfort?* London: Macmillan.

World Bank. 1996. *Pursuing Common Goals: Strengthening Relations Between Government and Development NGOs*. Dhaka.: University Press.

World Bank. 1998. *Bangladesh. From Counting to Poor to Making the Poor Count.* A World Bank Country Study. Washington, D.C.

Zeller, Manfred, Manohar Sharma, Akhter U. Ahmed, and Shaahidur Rashid. 2001. "Group-Based Financial Institutions for the Rural Poor in Bangladesh." International Food Policy Research Institute, Research Report 120. Washington, D.C.